**U.S. Department
of Transportation
Federal Aviation
Administration**

Advisory
Circular

ANNOUNCEMENT OF AVAILABILITY

Subject: MICRO-PAVER, PAVEMENT MANAGEMENT SYSTEM (PMS)	Date 4-16-87 Initiated by: AAS-200	AC No: 150/ 5000-6 Change:

1. <u>PURPOSE</u>. This advisory circular announces the availability of the Micro-PAVER program, Version 1.0.

2. <u>FOCUS</u>

    a. The primary purpose of an airport pavement is to provide adequate load-carrying capacity and good ride-quality. Upon completion of construction, pavements begin a gradual deterioration which is attributable to many factors. Consequently, there is a need to perform routine maintenance and rehabilitation of existing pavements. If routine maintenance is not performed during the early stages of deterioration, extensive repairs may be required at a later date. Therefore, early detection and repair of pavement defects is a most important preventative maintenance procedure.

    b. The selection of a specific rehabilitation method involves both engineering and economic considerations. In the maintenance and repair of airport pavements, the long-term effects rather than an immediate **short-**term remedy should be considered. The cost of several rehabilitation alternatives should be compared over some finite period of time (life cycle). The most effective means of accomplishing this is the implementation of a pavement management system which will provide the engineer with a practical decision-making procedure for identifying cost-effective maintenance and repair alternatives.

3. <u>BACKGROUND</u>,

    a. A software program, Micro-PAVER, has been developed by the U.S. Army Construction Engineering Research Laboratory **(USA-CERL)** under contract from the Federal Aviation Administration (FAA). Micro-PAVER is a pavement management system which utilizes guidelines contained in Advisory Circular **150/5380-6,** Guidelines and Procedures for Maintenance of Airport Pavements.

    b. Micro-PAVER allows for storage of pavement condition history, non-destructive testing data, and construction and maintenance history. This data base provides the user with many capabilities, including evaluation of current conditions , prediction of future conditions, determination of maintenance and repair needs, inspection scheduling, economic analysis **(life-**cycle costing), and budget planning.
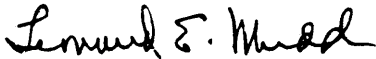
4. <u>SYSTEM REQUIREMENTS</u>. The Micro-PAVER program can be operated on an IBM-compatible personal computer having a hard disk drive with 20 mega-bytes storage capacity and 640K random access memory (RAM). Version 2.0, or greater, of MS-DOS is the operating system required.

5. <u>HOW TO OBTAIN THE PROGRAM</u>. The Micro-PAVER software package, together with a User's Guide, may be obtained from a distribution center. There are three distribution centers, with each center responsible for establishing individual fees for distribution and providing program updates and corrections as they become available. The fees will vary according to the service provided to the user (training, implementation assistance, user's group membership, etc.), but are expected to range between $300 and $500. Users should determine which center will best suit their needs. The distribution centers are:

> Pilot Strategic Support Center
> University of Illinois
> Office of Continuing Education
> 302 East John Street
> Champaign, Illinois 61820
> (217) 333-2882
> Point of Contact: Carolyn Carson
>
> National Association of State Aviation
>   Officials (NASAO)
> 777 14th Street, NW
> Washington, DC 20005
> (202) 783-0588
>
> American Public Works Association (APWA)
> 1313 E. 60th Street
> Chicago, Illinois 60637
> (312) 667-2200
> Point of Contact: James Ewing

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